Montana Department of Natural Resources and Conservation
Water Resources Division
Water Rights Bureau

ENVIRONMENTAL ASSESSMENT
For Routine Actions with Limited Environmental Impact

Part I. Proposed Action Description

1. *Applicant/Contact name and address*: David Gigoux
912 12th Ave.
Billings, MT 59044

2. *Type of action*: Application for Beneficial Water Use Permit No. 43QJ-30025001

3. *Water source name*: Unnamed Tributary of Yellowstone River

4. *Location affected by project*: Lot 17 Block 3 Willow Creek Subdivision located in the NW¼SE¼NE¼ Section 8, T2S, R24E, Yellowstone County.

5. *Narrative summary of the proposed project, purpose, action to be taken, and benefits*: This project is to use water from an unnamed tributary of the Yellowstone River from an existing ditch to irrigate 0.18 acres in Lot 17 Block 3 of Willow Creek Subdivision located in the NW¼SE¼NE¼ Section 8, T2S, R24E, Yellowstone County. DNRC will issue a provisional water use permit if all criteria for issuance under MCA 85-2-311 are met.

6. *Agencies consulted during preparation of the Environmental Assessment: (include agencies with overlapping jurisdiction)*
Montana Natural Heritage Program
Montana Historic Preservation Office
Montana Department of Fish Wildlife & Parks (MFWP)
Montana Department of Environmental Quality (MDEQ)
Sweet Grass County Planning Office

Part II. Environmental Review

1. Environmental Impact Checklist:

PHYSICAL ENVIRONMENT

WATER QUANTITY, QUALITY AND DISTRIBUTION

Water quantity *- Assess whether the source of supply is identified as a chronically or periodically dewatered stream by DFWP. Assess whether the proposed use will worsen the already dewatered condition.*

Determination: This Unnamed Tributary of Yellowstone River is not on the MFWP list of chronically or periodically dewatered streams. The proposed project should not worsen the stream condition.

Water quality *- Assess whether the stream is listed as water quality impaired or threatened by DEQ, and whether the proposed project will affect water quality.*

Determination: This unnamed tributary of Yellowstone River is not on the MDEQ list of water quality impaired or threatened streams. This proposed use for sprinkler irrigation should have no significant impact on water quality issues in the area.

Groundwater *- Assess if the proposed project impacts ground water quality or supply. If this is a groundwater appropriation, assess if it could impact adjacent surface water flows.*

Determination: There will be no pumping of groundwater; this proposed use of water should have no significant impact on groundwater quality or quantity in the area.

DIVERSION WORKS *- Assess whether the means of diversion, construction and operation of the appropriation works of the proposed project will impact any of the following: channel impacts, flow modifications, barriers, riparian areas, dams, well construction.*

Determination: The applicant will use a Water Ace model R7L pump specked at 30 psi for a 10 ft. lift at 27 GPM without a foot valve. The applicant has installed a foot valve which will reduce the pumping rate to 25 GPM. The diversion works should have no significant impact on channels, flow modifications, barriers, riparian areas, dams or well construction.

UNIQUE, ENDANGERED, FRAGILE OR LIMITED ENVIRONMENTAL RESOURCES

Endangered and threatened species *- Assess whether the proposed project will impact any threatened or endangered fish, wildlife, plants or aquatic species or any "species of special concern," or create a barrier to the migration or movement of fish or wildlife. For groundwater, assess whether the proposed project, including impacts on adjacent surface flows, would impact any threatened or endangered species or "species of special concern."*

Determination: The Montana Natural Heritage Program has identified two endangered species or species of special concern and one ecological site within this proposed project area. The species identified are the long billed curlew and a bird rookery. The bird rookery for the great blue heron is the largest in the state with approximately 200 nests. The double-crested cormorant has approximately 40 nests in the southwest corner of the rookery. The ecological site is the Yellowstone River Corridor. The applicant would be expected to ensure that these species and the ecological site are not harmed as a result of the construction and use of this irrigation system.

Wetlands *- Consult and assess whether the apparent wetland is a functional wetland (according to COE definitions), and whether the wetland resource would be impacted.*

Determination: The area does appear to have man induced wetland characteristics. The irrigated area is adjacent and any runoff should return to the source. The impacts should be minimal.

Ponds *- For ponds, consult and assess whether existing wildlife, waterfowl, or fisheries resources would be impacted.*

Determination: There should be no significant impacts on fisheries from this proposed use.

GEOLOGY/SOIL QUALITY, STABILITY AND MOISTURE - *Assess whether there will be degradation of soil quality, alteration of soil stability, or moisture content. Assess whether the soils are heavy in salts that could cause saline seep.*

Determination: This proposed use should not degrade soil quality or cause saline seep problems in the area. It is not expected that saline seep will occur.

VEGETATION COVER, QUANTITY AND QUALITY/NOXIOUS WEEDS - *Assess impacts to existing vegetative cover. Assess whether the proposed project would result in the establishment or spread of noxious weeds.*

Determination: There will be minimal soil disturbance during construction of this proposed project. It is expected that the landowner will control the spread of noxious weeds on his property.

AIR QUALITY - *Assess whether there will be a deterioration of air quality or adverse effects on vegetation due to increased air pollutants.*

Determination: There should be no deterioration of air quality or adverse effects on vegetation due to increased air pollutants from this proposed project.

HISTORICAL AND ARCHEOLOGICAL SITES - *Assess whether there will be degradation of unique archeological or historical sites in the vicinity of the proposed project.*

Determination: The Montana Historic Preservation Office has identified no archeological or historic sites of record in the proposed project area. A cultural resource inventory is unwarranted at this time. Should cultural materials be inadvertently discovered during this project the Montana Historical Society would like to be contacted and the site investigated.

DEMANDS ON ENVIRONMENTAL RESOURCES OF LAND, WATER, AND ENERGY - *Assess any other impacts on environmental resources of land, water and energy not already addressed.*

Determination: There should be no significant impacts on other environmental resources of land, energy, and water from this proposed use.

HUMAN ENVIRONMENT

LOCALLY ADOPTED ENVIRONMENTAL PLANS AND GOALS - *Assess whether the proposed project is inconsistent with any locally adopted environmental plans and goals.*

Determination: This proposed use is not inconsistent with any locally adopted environmental plans and goals for Yellowstone County.

ACCESS TO AND QUALITY OF RECREATIONAL AND WILDERNESS ACTIVITIES - *Assess whether the proposed project will impact access to or the quality of recreational and wilderness activities.*

Determination: There should be no significant adverse impacts on recreational or wilderness activities from this proposed use.

HUMAN HEALTH - *Assess whether the proposed project impacts on human health.*

Determination: There should be no significant impact on human health from this proposed use.

PRIVATE PROPERTY - *Assess whether there are any government regulatory impacts on private property rights.*
*Yes___ No_**X**__ If yes, analyze any alternatives considered that could reduce, minimize, or eliminate the regulation of private property rights.*

Determination: No significant impact.

OTHER HUMAN ENVIRONMENTAL ISSUES - *For routine actions of limited environmental impact, the following may be addressed in a checklist fashion.*

Impacts on:

(a) *Cultural uniqueness and diversity?* No significant impact

(b) *Local and state tax base and tax revenues?* No significant impact

(c) *Existing land uses?* No significant impact

(d) *Quantity and distribution of employment?* No significant impact

(e) *Distribution and density of population and housing?* No significant impact

(f) *Demands for government services?* No significant impact

(g) Industrial and commercial activity? No significant impact

(h) Utilities? No significant impact

(i) Transportation? No significant impact

(j) Safety? No significant impact

(k) Other appropriate social and economic circumstances? No significant impact

2. *Secondary and cumulative impacts on the physical environment and human population:*

Secondary Impacts: The use of this waste water for irrigation should not impact water users downstream of the project.

Cumulative Impacts: As more development takes place in this area, there could be higher demands for water for domestic, irrigation, stock, recreation, and other uses.

3. *Describe any mitigation/stipulation measures:* The applicant is aware that he would be required to cease using water if the use of the water is adversely impacting the rights of downstream users.

4. *Description and analysis of reasonable alternatives to the proposed action, including the no action alternative, if an alternative is reasonably available and prudent to consider:* Mr. Gigoux could drill wells to supply the amount of water he wishes to have for the proposed use.

The "no action" alternative would mean that Mr. Gigoux could not use this spring and ditch water to irrigate his yard.

PART III. Conclusion

1. Preferred Alternative: The preferred alternative would be to allow the use of the water from the unnamed tributary of Yellowstone River with the condition that the water rights of senior water users would not be adversely impacted.

2. Comments and Responses: None to report

3. Finding:
*Yes___ No_**X**__ Based on the significance criteria evaluated in this EA, is an EIS required?*

If an EIS is not required, explain why the EA is the appropriate level of analysis for this proposed action: No significant environmental impacts were identified. No EIS is required.

Name of person(s) responsible for preparation of EA:

Name: Christine Smith
Title: Water Resources Specialist
Date: May 3, 2007